



Food and Drug Administration  
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February 20, 2015

Günter Bissinger Medizintechnik GmbH  
Matthias Bissinger  
Managing Director  
Hans-Theisen-Straße 1  
79331 Teningen Baden-Wuerttemberg  
Germany

Re: K150024

Trade/Device Name: Monopolar Cables  
Regulation Number: 21 CFR 878.4400  
Regulation Name: Electrosurgical cutting and coagulation device and accessories  
Regulatory Class: Class II  
Product Code: GEI  
Dated: December 1, 2014  
Received: January 7, 2015

Dear Mr. Bissinger:

We have reviewed your Section 510(k) premarket notification of intent to market the device referenced above and have determined the device is substantially equivalent (for the indications for use stated in the enclosure) to legally marketed predicate devices marketed in interstate commerce prior to May 28, 1976, the enactment date of the Medical Device Amendments, or to devices that have been reclassified in accordance with the provisions of the Federal Food, Drug, and Cosmetic Act (Act) that do not require approval of a premarket approval application (PMA). You may, therefore, market the device, subject to the general controls provisions of the Act. The general controls provisions of the Act include requirements for annual registration, listing of devices, good manufacturing practice, labeling, and prohibitions against misbranding and adulteration. Please note: CDRH does not evaluate information related to contract liability warranties. We remind you; however, that device labeling must be truthful and not misleading.

If your device is classified (see above) into either class II (Special Controls) or class III (PMA), it may be subject to additional controls. Existing major regulations affecting your device can be found in the Code of Federal Regulations, Title 21, Parts 800 to 898. In addition, FDA may publish further announcements concerning your device in the Federal Register.

Please be advised that FDA's issuance of a substantial equivalence determination does not mean that FDA has made a determination that your device complies with other requirements of the Act or any Federal statutes and regulations administered by other Federal agencies. You must comply with all the Act's requirements, including, but not limited to: registration and listing (21 CFR Part 807); labeling (21 CFR Part 801); medical device reporting (reporting of medical

device-related adverse events) (21 CFR 803); good manufacturing practice requirements as set forth in the quality systems (QS) regulation (21 CFR Part 820); and if applicable, the electronic product radiation control provisions (Sections 531-542 of the Act); 21 CFR 1000-1050.

If you desire specific advice for your device on our labeling regulation (21 CFR Part 801), please contact the Division of Industry and Consumer Education at its toll-free number (800) 638-2041 or (301) 796-7100 or at its Internet address

<http://www.fda.gov/MedicalDevices/ResourcesforYou/Industry/default.htm>. Also, please note the regulation entitled, "Misbranding by reference to premarket notification" (21 CFR Part 807.97). For questions regarding the reporting of adverse events under the MDR regulation (21 CFR Part 803), please go to

<http://www.fda.gov/MedicalDevices/Safety/ReportaProblem/default.htm> for the CDRH's Office of Surveillance and Biometrics/Division of Postmarket Surveillance.

You may obtain other general information on your responsibilities under the Act from the Division of Industry and Consumer Education at its toll-free number (800) 638-2041 or (301) 796-7100 or at its Internet address

<http://www.fda.gov/MedicalDevices/ResourcesforYou/Industry/default.htm>.

Sincerely yours,

**Jennifer R. Stevenson -S**

For Binita S. Ashar, M.D., M.B.A., F.A.C.S.

Director

Division of Surgical Devices

Office of Device Evaluation

Center for Devices and

Radiological Health

Enclosure

## Indications for Use

510(k) Number (if known)

-- K150024

Device Name

Monopolar Cables

Indications for Use (Describe)

Cables for electrosurgery are designed to conduct electrical power from the output of a high-frequency electrosurgical generator to the electrosurgical instrument.

Do not exceed a maximum output of 6250 Vp of your generator.

Type of Use (Select one or both, as applicable)

☒ Prescription Use (Part 21 CFR 801 Subpart D)

☐ Over-The-Counter Use (21 CFR 801 Subpart C)

**PLEASE DO NOT WRITE BELOW THIS LINE – CONTINUE ON A SEPARATE PAGE IF NEEDED.**

### FOR FDA USE ONLY

Concurrence of Center for Devices and Radiological Health (CDRH) (Signature)

This section applies only to requirements of the Paperwork Reduction Act of 1995.

**\*DO NOT SEND YOUR COMPLETED FORM TO THE PRA STAFF EMAIL ADDRESS BELOW.\***

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**K** 150024

**VOLUME 006**

***510(k) Summary***

DATE OF APPLICATION: 2014-12-01

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## 510(k) Notification

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### 1. Device Name

Product code: GEI  
Trade Names: Bissinger Monopolar Cables  
Common Name: electrosurgical, cutting & coagulation & accessories  
Classification Name: Electrosurgical cutting and coagulation device and accessories.

### 2. Classification Product Code / Subsequent Code

#### 2.1. Product Code

Device	Medical Specialty	Review Panel	Product Code	Device Class	Regulation Number
Electrosurgical cutting and coagulation device and accessories.	Part 878	General & Plastic Surgery	GEI	2	878.4400

### 3. Predicate Device

Bissinger's Monopolar Cables are substantially equivalent to the following predicate devices, already cleared by the FDA:

Predicate Device	510(k) Number	510(k) Holder
Hans Hermann Laparoscopes and Accessories	K051610	HANS HERMANN GMBH
Suffer Electrosurgical Cables	K073450	Suffer Medizintechnik GmbH



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#### 4. Description of the Device

Bissinger monopolar cables are non-sterile, reusable Monopolar Cables fitting Bovie Electrosurgical units. They are designed to conduct electrical power from the output of a high frequency generator to the instrument.

#### 5. Indications for Use

Cables for electrosurgery are designed to conduct electrical power from the output of a high-frequency electrosurgical generator to the electrosurgical instrument.

Do not exceed a maximum output of 6250 Vp of your generator.

#### 6. Technological Characteristics

	NEW DEVICE	Predicate Device 1	Predicate Device 2	Reference DEVICE	RE-SULT
<b>510(k) Submitter/ Holder</b>	Bissinger Medizintechnik GmbH	HANS HERMANN GMBH	Sutter Medizintechnik GmbH	Jarit Surgical Instruments Inc.	NA
<b>Trade Name</b>	Bissinger Monopolar Cables	Hans Hermann Laparoscopes and accessories	Sutter Electrosurgical Cables	Unipolar Endoscopic Coagulator-cutter and Accessories	NA
<b>Device</b>	Bissinger Monopolar Cables	Laparoscopes	Sutter Electrosurgical Cables	JARIT SURGICAL INSTRUMENTS	NA
<b>510(k) Number</b>	--	K051610	K073450	K932456	NA
<b>Intended use</b>	<p>Cables for electrosurgery are designed to conduct electrical power from the output of a high-frequency electrosurgical generator to the electrosurgical instrument.</p> <p>Do not exceed a maximum output of 6250 Vp of your generator.</p>	<p>The Laparoscopes and accessories are intended for use in providing access to and visualization of body cavities, organs, and canals to perform various diagnostic and therapeutic surgical procedures.</p> <p>The arthroscope is indicated for illumination during joint examinations, arthroscopies, biopsies and diagnosis of joint disease in minimally invasive procedures of the knee, shoulder, wrist (carpal tunnel syndrome), temporal mandibular joint, ankle and elbow. The bipolar electrodes are used to coagulate and to remove or destroy tissue by the use of bipolar HF current.</p>	<p>To electrically connect monopolar /bipolar electrosurgical instruments to an electrosurgical generator.</p>	<p>For use by, or as directed by, a surgeon in endoscopic surgery. For use in endoscopic surgery. For use when a rigid endoscopic instrument for grasping and/or dissecting if soft tissue is determined to be appropriate by the surgeon. Monopolar electrosurgical current can be used for coagulation and/or cutting as determined necessary and appropriate by the surgeon.</p>	Substantial Equivalent
<b>Type</b>	Monopolar Cable	Monopolar silicone Cables	Monopolar silicone Cables	Jarit 600-290	Substantial Equivalent



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	NEW DEVICE	Predicate Device 1	Predicate Device 2	Reference DEVICE	RE-SULT
<b>Design</b>	Length: 3,080 m. Socket: Ø 4 mm Plug Ø 8 mm Connection: Bovie	Length: 3 m, Connector: 4 mm Connection: Erbe,, Martin, Berchtold,	Length: 3.5 mtr, 4,5 mtr. Connector: 4 mm Connection: Val- leylab, Conmed, Bovie, Bowa, Erbe, K. Storz, R. Wolf, Martin, Berchtold, Aesculap	Length: 3,080 m. Socket: Ø 4 mm Plug Ø 8 mm Connection: Bovie	Sub- stan- tialEqu ivalent
<b>Materials / Biocom- patibility</b>	Material: Silicon Cables do not have direct contact with the human body or only with uninjured skin, so that biocompatibility must not be evaluated.	<b>Silicon</b>	<b>Silicon</b>	<b>Silicon</b>	Sub- stan- tialequ iva- lenrt
<b>Sterility</b>	Reusable Instruments. Delivery non sterile. The instruments must be sterilized in moist heat (Autoclave). Pre-vacuum Cycle - Temperature: 132°C - Exposure time: 4 min. - Drying time: at least 20 min.	Reusable Instru- ments. Delivery non sterile. The instruments must be sterilized in moist heat (Autoclave). Pre-vacuum Cycle - Temperature: 132°C, max 137°C - Exposure time: 3 min. - Drying time: at least 10 min.	Sutter Electrosurgical Cables are supplied non-sterile and can be reused after clean- ing and steam sterili- zation. Steam-sterilize in the autoclave in accord- ance with DIN EN 13060 / DIN EN 285. Fractioned pre- vacuum sterilization: Temperature 134 °C (273 °F), 3 minutes; max. Temperature 138 °C (280 °F), max. duration 20 minutes.	Similar: Reusable In- struments	Sub- stan- tialEqu ivalent
<b>Compati- bility with environ- ment and other devices</b>	Generators: Bovie	Generators: : Erbe,, Martin, Berchtold,	Generators: Erbe, Martin, Valleylab, Conmed, Berchtold, Bowie, Bowa, Aescu- lap	Generators: Bovie	Sub- stan- tialEqu ivalent
<b>Standards met</b>	IEC 60601-2-2: 2009	IEC 60601-2-2:2009	IEC 60601-2-2:2007	IEC 60601-2-2:2009	Sub- stan- tialEqu ivalent
<b>Energy applied</b>	Power maxima 6.250 Vp	Power maxima 6.250 Vp	Maximum Monopolar cablesVoltage 10000 Vpp	Power maxima 6.250 Vp	Sub- stan- tialEqu ivalent

## 7. Testing

Testing in order to proof safety and effectiveness of Bissinger's Monopolar Cables has been performed according to recognized consensus Standards and results are conforming to the respective requirements.

### 7.1. Electrical Safety

The devices subject to this submission have been tested according to the requirements of IEC 60601 and IEC 60601-2-2:2009.



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#### **7.2. Sterilization**

The sterilization process has been validated under consideration of recognized standards.

Testing shows that the Products can be steam sterilized with a sufficient sterility assurance level by use of standard sterilization parameters.

#### **7.3. Reprocessing**

Reprocessability was tested and validated under consideration of recognized standards.

#### **7.4. Manual cleaning**

Manual cleaning validation was performed under consideration of recognized standards.

### **8. Biocompatibility**

All requirements of biocompatibility are met through the composition of the used materials which demonstrate the appropriate levels of biocompatibility for its clinical use. The used materials are also used in many other medical devices and have an established history of safe use and biocompatibility outlined in ISO 10993-1.

### **9. Substantial Equivalence Summary / Conclusion**

Based on available 510(k) information provided herein, Bissinger Monopolar Cables are considered substantial equivalent to the predicate devices in terms of indications for use, material, technology, design and performance specifications.

There are no differences between the devices which would raise new issues of safety or effectiveness.